

REMARKS

By this Amendment, Applicants amend claims 1-5 and 7-12, and add new claims 13-16. Claims 1-16 are therefore pending in this application.

In the Office Action of October 6, 2004,¹ claims 1-10 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,393,488 to *Araujo* (“*Araujo*”) in view of U.S. Patent No. 6,615,357 to *Boden et al.* (“*Boden*”); claim 11 was rejected under 35 U.S.C. § 103(a) as unpatentable over *Araujo* in view of U.S. Patent No. 5,918,019 to *Valencia* (“*Valencia*”); and claim 12 was rejected under 35 U.S.C. § 103(a) as unpatentable over *Araujo* in view of *Valencia* in further view of U.S. Patent Application Publication No. 2003/0033401 (“*Poisson*”). Applicants address the rejections and new claims below.

Rejection of claims 1-10 under 35 U.S.C. § 103(a)

Applicants traverse the rejection of claims 1-10 under 35 U.S.C. § 103(a) because a case for *prima facie* obviousness has not been established based on *Araujo* and *Boden*. To establish *prima facie* obviousness under 35 U.S.C. § 103(a), three requirements must be met. First, the applied references, taken alone or in combination, must teach or suggest each and every element recited in the claims. *See* M.P.E.P. § 2143.03 (8th ed. 2001). Second, there must be some suggestion or motivation, either in the reference(s) or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the reference(s) in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of these requirements must “be found in the prior art, and not be based on applicant’s disclosure.” M.P.E.P. § 2143 (8th ed. 2001).

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether or not any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

With regard to claim 1, *Araujo* fails to teach or suggest at least the following feature:

providing, by the at least one additional processor, to the first processor the second virtual address and to the second processor the first virtual address to enable one or more tunnels between the first and the second processors when the at least one additional processor determines that the first selection on behalf of the first processor includes the name of the second processor and the second selection on behalf of the second processor includes the name of the first processor.

Araujo is directed to resolving network address translator (NAT) IP subnet address conflicts

(Abstract). While acknowledging that *Araujo* does not disclose enabling “one or more tunnels

between the first and the second processors,” the Examiner alleges that the above-noted

“providing” feature is “partly” disclosed (Office Action “OA” at 3). Specifically, the Examiner

notes *Araujo*’s disclosure of “an automatic NAT configuration system” (col. 3, lines 45-59).

Araujo discloses that the automatic NAT configuration system “facilitates the connection of

communication paths between devices included in one network . . . of the NAT and devices

included in other networks” (col. 3, lines 46-49). *Araujo* also discloses mapping network

addresses of devices in a configuration table to corresponding types of communication frames or

applications and using “information in the mapped configuration table to translate network

addresses between different networks and establish . . . communication paths” (col. 3, lines 50-

59). According to the Examiner, the “first processor is represented by the device in the first

network . . . the second processor is represented by the device in the second network . . . [and

the] additional processor is represented by the NAT system” (OA at 3).

Applicants disagree with the Examiner’s interpretation of *Araujo*. *Araujo* does not wholly or partly disclose or suggest the above-noted “providing” feature of claim 1. Contrary to the Examiner’s position, the disclosure of an automatic NAT configuration system that establishes communication paths between devices in one network and devices in other networks

does not teach or suggest “providing . . . to the first processor the second virtual address and to the second processor the first virtual address . . . when the at least one additional processor determines that the first selection on behalf of the first processor includes the name of the second processor and the second selection on behalf of the second processor includes the name of the first processor,” as claimed. Even assuming, for the sake of argument, that a device in the network of the NAT configuration system were a “first processor,” a device in another network were a “second processor,” and the NAT system were an “additional processor,” *Araujo* would not disclose the “providing” recited in claim 1. Although *Araujo* discloses mapping addresses and establishing communication paths, it does not disclose that the NAT system provides a virtual address of a first processor to a second processor and a virtual address of the second processor to the first processor when the NAT system determines that a first selection on behalf of the first processor includes the name of the second processor and a second selection on behalf of the second processor includes the name of the first processor, as claimed. Neither the relied-upon disclosure, nor any other disclosure, in *Araujo* teaches or suggests the above-noted “providing” feature recited in claim 1.

Boden does not cure *Araujo*’s deficiencies. *Boden* is directed to providing IP security in a VPN using network address translation by performing different types of VPN network address translations (Abstract). Although, as the Examiner notes, *Boden* mentions defining a tunnel network address translation rule and applying the rule to a tunnel endpoint (col. 6, lines 4-9; OA at 3), the reference does not teach or suggest at least the “providing” recitation noted above. Accordingly, neither *Araujo* nor *Boden*, nor any combination thereof, teaches or suggests each and every feature of claim 1. As such, *prima facie* obviousness has not been established.

Moreover, *prima facie* obviousness has not been established at least because the requisite motivation to combine *Araujo* and *Boden* is lacking. Determinations of obviousness must be supported by evidence on the record. *See In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (finding that the factual determinations central to the issue of patentability, including conclusions of obviousness by the Board, must be supported by “substantial evidence”). Further, the desire to combine references must be proved with “substantial evidence” that is a result of a “thorough and searching” factual inquiry. *In re Lee*, 277 F.3d 1338, 1343-1344 (Fed. Cir. 2002) (quoting *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52).

In this case, the Office Action does not show that a skilled artisan considering *Araujo* and *Boden*, and not having the benefit of Applicants’ disclosure, would have been motivated to combine the references in a manner resulting in Applicants’ claimed combination. The Examiner alleged that a skilled artisan would have combined the references “because a tunnel will enable the communication to be securely exchanged within the network” (OA at 3). This allegation in the Office Action is not properly supported and does not show that a skilled artisan would have combined the references as alleged. To begin with, the Examiner does not specify what “communication” or “network” would be secured by the alleged combination, or how *Boden*’s teachings of defining and applying tunnel network address translation rules would be combined with *Araujo* to achieve the alleged result. In addition, the mere fact that a tunnel would secure a communication does not show that a skilled artisan would have been motivated to combine the references as alleged.

Applicants call attention to M.P.E.P. § 2143.01, which makes clear that: “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination” (citations omitted). The

Office Action does not show that the cited art “suggests the desirability” of the alleged combination. Applicants submit that the conclusions in the Office Action were not reached based on facts gleaned from the cited references and that, instead, teachings of the present application were improperly used in hindsight to reconstruct the prior art.

For at least the foregoing reasons, *prima facie* obviousness has not been established with respect to claim 1 and the rejection of that claim under 35 U.S.C. § 103(a) should be withdrawn. Claims 2-8 depend upon base claim 1, and the § 103(a) rejection of those dependent claims should be withdrawn for at least reasons similar to those presented above in connection with claim 1.

Similar to claim 1, independent claim 9 recites a combination including:

. . . providing to the first processor the second virtual address and to the second processor the first virtual address to enable one or more tunnels between the first and the second processors when the at least one additional processor determines that the first selection on behalf of the first processor includes the name of the second processor and the second selection on behalf of the second processor includes the name of the first processor.

Although claim 9 is of different scope than claim 1, the § 103(a) rejection of claim 9 should be withdrawn for at least reasons similar to those presented above in connection with claim 1.

Independent claim 10, as currently presented, recites a combination including:

a tunneling interface that provides a set of names that includes the name of the second processor, receives information indicating a consent on behalf of the first processor to enabling a tunnel between the first processor and the second processor, provides a set of names that includes the name of the first processor, and receives information indicating a consent on behalf of the second processor to enabling a tunnel between the second processor and the first processor; and

a controller that determines a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and provides to each

of the first and second processors the first and second virtual addresses to enable one or more tunnels between the first and the second processors, when the controller determines that the first selection on behalf of the first processor includes the name of the second processor and the second selection on behalf of the second processor includes the name of the first processor.

Araujo does not teach or suggest at least the above-noted features. In alleging that *Araujo* discloses the claimed “tunneling interface,” the Examiner notes *Araujo*’s disclosure of a NAT subnet support system 320 producing “alternative address translation information for communication frames directed to devices included in the primary LAN of NAT subnet support system 320 from devices not included in the primary LAN . . .” (col. 5, lines 58-63; OA at 6). The Examiner also notes *Araujo*’s disclosure that NAT system 320 includes a DNS service that provides a mapping of URL names to LAN IP addresses and that, if a device in the network of NAT system 320 has the same address as a device in another network forwarding a communication frame to NAT system 320, NAT system 320 provides an alternative address for that device to the other network (col. 5, lines 63 – col. 6, line 9; OA at 6). Neither these disclosure, nor any other disclosures, in *Araujo* teach or suggest the claimed “tunneling interface.” Providing alternative addresses to resolve subnet address conflicts, as described by *Araujo*, does not teach or suggest the claim 10 “tunneling interface” that, *inter alia*, receives information indicating a consent on behalf of a first processor to enabling a tunnel between the first processor and a second processor, and receives information indicating a consent on behalf of the second processor to enabling a tunnel between the second processor and the first processor.

While acknowledging that *Araujo* fails to disclose “one or more tunnels,” as recited in claim 10, the Examiner alleges that *Araujo* partly discloses the claimed “controller” (OA at 6). Applicants disagree. *Araujo* does not wholly or partly disclose the claimed “controller.” The Examiner notes *Araujo*’s disclosure of NAT system 320 providing an alternative address for a

device in its network to another network if that device has the same address as a device in the other network forwarding a communication frame to NAT system 320 (col. 6, lines 9-18; OA at 6). The Examiner also notes that NAT system 330 provides an alternative source address for a device included in its primary LAN (PC 333) when that device requests an address for a service (FTP server 321) in a primary LAN of another NAT system (320) and the address of that service conflicts with an address of a device in the primary LAN of NAT system 330 (col. 6, lines 26-30; OA at 6). In addition, the Examiner notes the disclosure that the NAT system 330 provides translations “for communication frames indicating the alternative address as a destination” (col. 6, lines 30-33; OA at 6). These disclosures in *Araujo* of providing alternative addresses to resolve subnet address conflicts do not teach or suggest a “controller” that provides to each of first and second processors first and second virtual addresses to enable one or more tunnels between the first and the second processors, when the controller determines that a first selection on behalf of the first processor includes the name of the second processor and a second selection on behalf of the second processor includes the name of the first processor, as claimed. Indeed, neither the relied-upon disclosure, nor any other disclosure, in *Araujo* teaches or suggests the claimed “controller.”

In rejecting claim 10, the Examiner alleges that “the tunnel is inherent with the NAT implementation within a VPN” (OA at 6). The Examiner has not established inherency. As M.P.E.P. § 2112 makes clear:

To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient’” (emphasis added, internal citations omitted).

In addition, M.P.E.P. § 2112 states:

[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art (internal citations omitted).

The Office Action fails to provide sufficient evidence from *Araujo*, or any recourse to extrinsic evidence, that makes clear that the subject matter of claim 10 is necessarily present in the reference. Further, the Office Action fails to present sufficient factual basis and technical reasoning to demonstrate inherency. That *Araujo* mentions that NAT system 320 may be “implemented in a virtual private network” does not evidence that the claim recitations relating to tunnels are necessarily present in *Araujo*. Consequently, the Examiner cannot properly infer that the tunnel-related subject matter of claim 10 is inherently disclosed by *Araujo*.

Boden does not cure *Araujo*’s deficiencies. While *Boden* mentions defining a tunnel network address translation rule and applying the rule to a tunnel endpoint, the reference does not teach or suggest at least the “tunneling interface” and “controller” recited in claim 10. Accordingly, neither *Araujo* nor *Boden*, nor any combination thereof, teaches or suggests each and every feature of claim 10. For at least this reason, *prima facie* obviousness has not been established with respect to claim 10. Moreover, for at least reasons similar to those presented above in connection with claim 1, the requisite motivation for combining *Boden* with *Araujo* is lacking. For at least this additional reason, *prima facie* obviousness has not been established with respect to claim 10. The rejection of claim 10 under 35 U.S.C. § 103(a) should therefore be withdrawn.

Applicants request withdrawal of the rejection of claims 1-10 under 35 U.S.C. § 103(a) and the timely allowance of those claims.

Rejection of claim 11 under 35 U.S.C. § 103(a)

Applicants traverse the rejection of claim 11 under 35 U.S.C. § 103(a) because a case for *prima facie* obviousness has not been established based on *Araujo* and *Valencia*. Independent claim 11 recites *inter alia*:

receiving, at the at least one additional processor, information indicating a consent on behalf of the first processor and second processor to enabling a tunnel between the first and the second processor . . . and

providing, by the at least one additional processor, to the first processor the second virtual address and to the second processor the first virtual address to enable one or more tunnels between the first and the second processors when the at least one additional processor determines that the first selection on behalf of the first processor includes the name of the second processor and the second selection on behalf of the second processor includes the name of the first processor.

As affirmed by the Examiner, *Araujo* fails to disclose the “receiving” feature noted above. In addition, for at least reasons similar to those presented above in connection with claim 11, *Araujo* fails to disclose the above-noted “providing” feature.

Valencia does not cure *Araujo*’s deficiencies. *Valencia* is directed to providing “virtual direct dial-up service” to private networks (Abstract). *Valencia* discloses that a remote client (32) can access a LAN (22) “through a virtual dial-up session” using a network access server (NAS 27) (col. 3, lines 57-58). As the Examiner notes, *Valencia* discloses using the L2F protocol to “project a point-to-point link level session” from the server (NAS 27) to a gateway (20) (col. 4, lines 1-4; OA at 7). The gateway uses the L2F protocol to verify that the remote client (32) is authorized to use the LAN and to establish a tunnel (33) between the server and the gateway (col. 4, lines 4-9). Contrary to the Examiner’s position, *Valencia*’s disclosure of a virtual dial-up session does not teach or suggest the “receiving” feature of claim 11 noted above. Verifying that a remote client is an authorized LAN user and establishing, by a gateway, a tunnel

between a server and the gateway, as described by *Valencia*, does not constitute “receiving, at the at least one additional processor, information indicating a consent on behalf of the first processor and second processor to enabling a tunnel between the first and the second processor,” as recited in claim 11. *Valencia*’s gateway (20) does not receive information indicating a consent on behalf of a first processor and a second processor to enabling a tunnel between the first and the second processors. *Valencia*’s gateway (20) merely establishes a tunnel (33) between itself and the server (27). Accordingly, even if *Valencia*’s gateway (20) were an “additional processor,” *Valencia* does not teach or suggest the claim 11 “receiving” recitation.

In addition, *Valencia* does not teach or suggest at least the virtual address “providing” recitation of claim 11. Accordingly, neither *Araujo* nor *Valencia*, nor any combination thereof, teaches or suggests each and every feature of claim 11. For at least this reason, *prima facie* obviousness has not been established with respect to claim 11.

Moreover, the requisite motivation for combining the references is lacking. The Office Action does not show that a skilled artisan would have been motivated to combine the teachings *Valencia* with *Araujo* in a manner resulting in Applicants’ claimed combination. The Examiner alleges that a skilled artisan would have combined the references “because a tunnel will enable the communication to be securely exchanged within the network” (OA at 8). This allegation in the Office Action is not properly supported and does not show that a skilled artisan would have combined the references as alleged. The Examiner does not specify what “communication” or “network” would be secured by the alleged combination, or how *Valencia*’s teachings of virtual dial-up sessions would be combined with *Araujo* to achieve the alleged result. Furthermore, the mere assertion that a tunnel would secure a communication does not show that a skilled artisan would have been motivated to combine the references as alleged.

The Office Action does not show that the cited art “suggests the desirability” of the alleged combination. Applicants submit that the conclusions in the Office Action were not reached based on facts gleaned from the cited references and that, instead, teachings of the present application were improperly used in hindsight to reconstruct the prior art. For at least these additional reasons, *prima facie* obviousness has not been established with respect to claim 11.

Because *prima facie* obviousness has not been established, the § 103(a) rejection of claim 11 should be withdrawn. Applicants therefore request withdrawal of that rejection and the timely allowance of claim 11.

Rejection of claim 12 under 35 U.S.C. § 103(a)

Applicants traverse the rejection of claim 12 under 35 U.S.C. § 103(a) because a case for *prima facie* obviousness has not been established based on *Araujo*, *Valencia*, and *Poisson*.

Claim 12 depends upon claim 11. As explained above, neither *Araujo* nor *Valencia* teaches or suggests each and every feature of claim 11. *Araujo* and *Valencia* therefore fail to teach or suggest each and every feature of claim 12, which includes all of the features of claim 11. As noted above, neither *Araujo* nor *Valencia* teaches or suggests the claimed consent “receiving” and virtual address “providing” recited in claim 11 and required by claim 12. In addition, as affirmed by the Examiner, neither *Araujo* nor *Valencia* teaches or suggests the following features recited in claim 12 (OA at 8):

displaying, by a processor separate from the at least one additional processor, an object representing the first processor and an object representing the second processor; and

the administrator moving the displayed object representing the first processor and placing the object representing the first processor on the displayed object representing the second processor in order to indicate consent on behalf of the first processor and the second

processor to enable a tunnel between the first processor and the second processor.

Poisson does not cure the deficiencies of *Araujo* and *Valencia*. Although *Poisson* is directed to monitoring a virtual private network (Abstract), *Poisson* does not disclose or suggest the claimed consent “receiving” and virtual address “providing” recited in claim 11 and required by claim 12.

Furthermore, *Poisson* does not teach or suggest at least the claimed “administrator moving” feature of claim 12 noted above. As the Examiner notes, *Poisson* discloses an extranet switch that offers a web-server and web-pages “programmed to configure the different virtual private network functions in response to administrator interaction with the web-pages” (§ 0004; OA at 8). *Poisson* discloses that the administrator can navigate each VPN switch to “configure tunneling, authentication, packet filtering, and other functions . . .” (§ 0004). *Poisson* also discloses, as the Examiner notes, a GUI through which an administrator can enable/disable tunnel protocols and that “gives the administrator the ability to enable or disable tunneling session” (§ 41; Fig. 9). Contrary to the Examiner’s position, these disclosures do not teach or suggest at least the “administrator moving” feature of claim 12. Although *Poisson* mentions that an administrator can configure VPN functions, it does not disclose moving a displayed object representing a first processor and placing that object on a displayed object representing a second processor in order to indicate consent on behalf of the first processor and the second processor to enable a tunnel between the first processor and the second processor, as claimed. In fact, Fig. 9 of *Poisson*, to which the relied-portion of the reference refers, merely illustrates various switch service settings. Accordingly, neither *Araujo*, *Valencia*, nor *Poisson*, nor any combination thereof, teaches or suggests each and every feature of claim 12. As such, *prima facie* obviousness has not been established with respect to that claim.

Moreover, the requisite motivation for combining the references is lacking. For at least reasons similar to those presented above in connection with claim 11, the requisite motivation for combining *Araujo* and *Valencia* is lacking. Additionally, the Office Action does not show that a skilled artisan would have been motivated to combine the teachings *Poisson* with the alleged combination of *Araujo* and *Valencia* in a manner resulting in Applicants' claimed combination. The Examiner alleged that a skilled artisan would have combined the references "because a graphical user interface will enable the administrator to conveniently make changes to the network configuration" (OA at 8). This allegation in the Office Action is not properly supported and does not show that a skilled artisan would have combined the references as alleged. The mere fact that a GUI might allow an administrator to make changes to a network configuration does not establish that a skilled artisan would have combined the references as alleged. Further, the Examiner provides no motivation whatsoever to support the notion that a skilled artisan would combine the references such that the GUI would allow an administrator to move a displayed object representing a first processor and place it on a displayed object representing a second processor in order to indicate consent on behalf of the first processor and the second processor to enable a tunnel between the first processor and the second processor.

Again, the Office Action does not show that the cited art "suggests the desirability" of the alleged combination. The conclusions in the Office Action were not reached based on facts gleaned from the cited references and, instead, teachings of the present application were improperly used in hindsight to reconstruct the prior art. For at least these additional reasons, *prima facie* obviousness has not been established with respect to claim 12.

Because *prima facie* obviousness has not been established, the rejection of claim 12 under 35 U.S.C. § 103(a) should be withdrawn. Applicants therefore request withdrawal of the § 103(a) rejection and the timely allowance of claim 12.

New claims 13-16

New claims 13, 14, 15 and 16 depend upon allowable base claim 1, 9, 10, and 11, respectively. Applicants submit that new claims 13-16 should be allowed at least because of such dependency. Applicants further submit that the applied art fails to teach or suggest all of the features recited in new claims 13-16. For at least these reasons, Applicants request the timely allowance of new claims 13-16.

Conclusion


The claimed invention is neither anticipated nor rendered obvious in view of the art cited against this application. Applicants request the Examiner's reconsideration of the application in view of the foregoing, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

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By: 
Frank A. Italiano
Reg. No. 53,056